

FAQs:

[Easy Access Rules XML](#)

Question:

How to find and extract the images embedded in the OOXML flat file?

Answer:**Automated approach**

In the EASA XML export files, images (binary files) are stored in a Base64 ASCII string encoded format, following OpenXML standards. When programmatically accessing the file, Base64 is simple to convert back to binary, e.g.:

```
using System;
using System.Text;
public class CLRTest
{
    public static byte[] ConvertBase64ToBinary(string str)
    {
        if (str == null)
        {
            return null;
        }
        return Convert.FromBase64String(str);
    }
}
```

But how do you locate the data? An example:

Here is a screenshot of a sample eRules XML export, opened in Word:

- (1) Where a runway is not provided with a stopway or a clearway and the threshold is located at the extremity of the runway, the four declared distances should normally be equal to the length of the runway



Figure 1

And here is the XML, in pkg:part pkg:name="/word/document.xml":

```
<a:graphic
  xmlns:a="http://schemas.openxmlformats.org/drawingml/2006/main">
  <a:graphicData
    uri="http://schemas.openxmlformats.org/drawingml/2006/picture">
    <pic:pic xmlns:pic="http://schemas.openxmlformats.org/drawingml/2006/picture">
      <pic:nvPicPr>
        <pic:cNvPr id="638492513" name="adrAMCannexIVimage1.png"/>
        <pic:cNvPicPr/>
      </pic:nvPicPr>
      <pic:blipFill>
        <a:blip r:embed="rId18" cstate="print"/>
        <a:stretch>
        </pic:blipFill>
        <pic:spPr>
        </pic:pic>
      </a:graphicData>
    </a:graphic>
```

The "rId18" value in the <a:blip> element refers to this relation in pkg:part pkg:name="/word/_rels/document.xml.rels":

```
<Relationship
  Type="http://schemas.openxmlformats.org/officeDocument/2006/relationships/image"
  Target="media/image3.png" Id="rId18"/>
```

And this finally gives you the location of the Base64 encoded data:

```
<pkg:part pkg:name="/word/media/image3.png" pkg:contentType="image/png" pkg:compression="store">
  <pkg:binaryData>iVBORw0KGgoAAAANSUHEUgAAAAAABsCAYAAACineObAAAAAXNSR0IArs4c6QAAAAARnQU1BAACx
  jwv8YQUAAAACJcEhZcwAADsMAAA7DacdVqGQAAALySURBVHhe7d1pUBRnAsZxvRqN192s8ZsTGmS
  UjeHUVNbzmvduLE84hExKIfCeAEiihCIOosRQRBEUcQ1EMZjQaOCioAcSkhpogkSFQURvDg8EDDx
  CCgeIJ7PTvc00hgoKeDzvTzq3ormbcHq5wM/3T39NtjAyIimRgQIpKNASEi2RgQIpKNASEi2RgQ
  IpKNASEi2RgQIpKNASEi2RgQIpKNASEi2RgQIpLN4gJy9epVlJeXo6SkBGVlZRwcqhlpaxiP69c
  uSL9RjxbFheQ7Oxs90/fHzY2Nhwqhy9evVCYmKi9BvxbFlsQGbOnInc3Fxs376dg0MVY+/evQgP
  P2dzNEUkKcGIGmGSD3i4uIYEHMwIKPMDIzGBBSMwbETAwLcRkDYiYghNSMATEA0JaxoCYiQEb
```

Manual approach

For a very simple *manual* approach:

1. Open the XML-file in Word
2. Select the image you want to extract
3. RightClick the image and select “Save as picture”:

(4) Landing distance available (LDA).

The take-off run available (TORA), take-off distance available (TODA) and landing distance available (LDA) shall be determined in accordance with the following (all declared distances are illustrated for operation at the extremity of the runway, the declared length of the runway).

(1) Where a runway is not provided with a stopway or a clearway at the extremity of the runway, the declared length of the runway is the length of the runway.

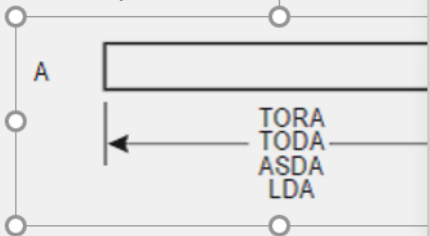


Figure 1

(2) When a runway is provided with a clearway (CWY), the length of clearway is the length of the clearway.

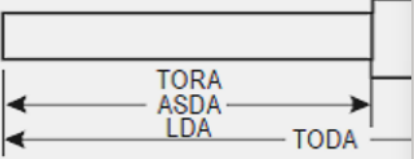


Figure 2

Contextual text from the right side of the image: 'op dista...', 'ding to...', 'd is loca...', 'be equa...', 'the len'

Contextual text from the bottom right: 'the len'

Contextual text from the top right: 'the len'

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Link:

<https://www.easa.europa.eu/en/faq/136269>